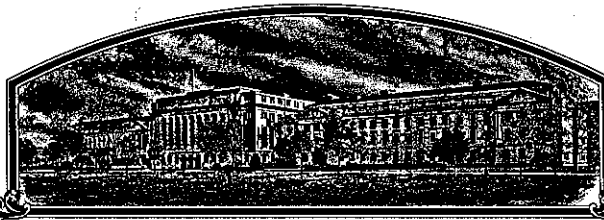


No.

8400033



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Black Jewell Popcorn, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS OF THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN

'Black Jewell 85'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 22nd day of February in the year of our Lord one thousand nine hundred and eighty-five.

Attest:

Kenneth H. Kwan
Commissioner

Plant Variety Protection Office
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

FORM APPROVED: OMB NO. 0581-0005

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S) Black Jewell Popcorn, Inc.		2. TEMPORARY DESIGNATION HA BJ-1 RJS		3. VARIETY NAME BLACK JEWELL 85 RJS 1/30/85	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) RR# 1 St. Francisville, IL 62460		5. PHONE (Include area code) (618) 948-2303		FOR OFFICIAL USE ONLY VPPO NUMBER 8400033	
6. GENUS AND SPECIES NAME Zea Maize		7. FAMILY NAME (Botanical) Graminae		FILING DATE 12/27/83 TIME 2:30 <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.	
8. KIND NAME Black Jewell Popcorn		9. DATE OF DETERMINATION Oct 1983		FEE RECEIVED AMOUNT FOR FILING \$ 1,000 DATE 12/27/83 AMOUNT FOR CERTIFICATE \$ 500.00 DATE 1/29/85	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation				12. DATE OF INCORPORATION October 21, 1983	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Illinois					
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Charles Klein 2743 Cathlinette Road Vincennes, IN 47591 PHONE 812-882-6023 618 948 2303					
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.) b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.) d. <input type="checkbox"/> Exhibit D, Additional Description of the Variety					
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) <input checked="" type="checkbox"/> Yes (If "Yes," answer items 16 and 17 below) <input type="checkbox"/> No					
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> Foundation <input checked="" type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified RJS 1/30/85		
18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input checked="" type="checkbox"/> No					
19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input checked="" type="checkbox"/> No					
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF APPLICANT X Charles Klein for Black Jewell Popcorn Inc.				DATE November 10, 1983	
SIGNATURE OF APPLICANT				DATE	

BLACK JEWELL POPCORN

<BJ-1> 'BLACK JEWELL 85'

Corn Application No. 8400033

RJS 1/30/85

Exhibit A:

'BLACK JEWELL 85'

Pedigree: <BJ-1> is derived from an unknown black popcorn imported from Germany during World War II and crossed with an unnamed white hulless. This cross of the original black and white hulless was subsequently crossed with an unnamed red popcorn. After several generations of sibcrossing with selected plants of this final cross, <BJ-1> has remained stable through two generations of selfing when normal open pollinated selection of seed is used.

There is approximately a 1:100,000 dark red seed occurrence and a 1:200,000 white seed occurrence.

Corn Application No: 8400033, (BJ-1) = 'BLACK JEWELL 85'
R/S 1/30/85

Exhibit B:

Purdue A-265-W a white popcorn, exhibits plant characteristics most similar to <BJ-1>. Kernel size and shape is also similar. The major difference between the varieties is the color of the Aleuron layer; <BJ-1> being a very dark purple and Purdue A-265-W being white.

Expansion of Purdue A-265-W is also better than <BJ-1>. <BJ-1> has an expansion ratio of approximately 24:1 and Purdue A-265-W is approximately 32:1.

OBJECTIVE DESCRIPTION OF VARIETY
CORN (ZEA MAYS)

NAME OF APPLICANT(S) Black Jewell Popcorn, Inc.	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) RR# 1 St. Francisville, IL 62460	PVPO NUMBER 8400033
	VARIETY NAME OR TEMPORARY DESIGNATION <BJ-17> 'BLACK JEWELL 85'

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g., 089 or 09) when number is either 99 or less or 9 or less.

1. TYPE:

5

1 = SWEET 2 = DENT 3 = FLINT 4 = FLOUR 5 = POP 6 = ORNAMENTAL

2. REGION WHERE BEST ADAPTED IN THE U.S.A.:

7

1 = NORTHWEST 2 = NORTHCENTRAL 3 = NORTHEAST 4 = SOUTHEAST
5 = SOUTHCENTRAL 6 = SOUTHWEST 7 = MOST REGIONS

3. MATURITY (In Region of Best Adaptability):

(Under "comments" (pg. 3) state how heat units were calculated)

11

DAYS FROM EMERGENCE TO 50% OF PLANTS IN SILK

1111

HEAT UNITS

11

DAYS FROM 50% SILK TO OPTIMUM EDIBLE QUALITY

1111

HEAT UNITS

11

DAYS FROM 50% SILK TO HARVEST AT 25% KERNEL MOISTURE

1111

HEAT UNITS

4. PLANT:

175

CM. HEIGHT (To tassel tip)

118

CM. EAR HEIGHT (To base of top ear)

14

CM. LENGTH OF TOP EAR INTERNODE

Number of Tillers:

4

1 = NONE 2 = 1-2 3 = 2-3 4 = > 3

Number of Ears Per Stalk:

4

1 = SINGLE 2 = SLIGHT TWO-EAR TENDENCY
3 = STRONG TWO-EAR TENDENCY 4 = THREE-EAR TENDENCY

Cytoplasm Type:

1

1 = NORMAL 2 = "T" 3 = "S" 4 = "C" 5 = OTHER (Specify)

5. LEAF (Field Corn Inbred Examples Given):

Color:

1

1 = LIGHT GREEN (HY) 2 = MEDIUM GREEN (WF9) 3 = DARK GREEN (B14) 4 = VERY DARK GREEN (K166)

Angle from Stalk (Upper half):

1

1 = < 30° 2 = 30-60° 3 = > 60°

Sheath Pubescence:

2

1 = LIGHT (W22) 2 = MEDIUM (WF9)
3 = HEAVY (OH26)

Marginal Waves:

1

1 = NONE (HY) 2 = FEW (WF9) 3 = MANY (OH7L)

Longitudinal Creases:

1

1 = ABSENT (OH51) 2 = FEW (OH56A)
3 = MANY (PA11)

Width:

06

CM. WIDEST POINT OF EAR NODE LEAF

Length:

072

CM. EAR NODE LEAF

11

NUMBER OF LEAVES PER MATURE PLANT

6. TASSEL:

2 1

NUMBER OF LATERAL BRANCHES

Branch Angle from Central Spike:

3

1 = $< 30^\circ$ 2 = $30-40^\circ$ 3 = $> 45^\circ$

Penduncle Length:

CM. FROM TOP LEAF TO BASAL BRANCHES

Pollen Shed:

3

1 = LIGHT (WF9)

2 = MEDIUM

3 = HEAVY (KY21)

Anther Color:

1 = YELLOW

2 = PINK

3 = RED

4 = PURPLE

5 = GREEN

1

Glume Color:

6 = OTHER (Specify)

Pollen Restoration for Cytoplasm (0 = Not Tested, 1 = Partial, 2 = Good)

0

"T"

0

"S"

0

"C"

0

OTHER (Specify Cytoplasm and degrees of restoration)

7. EAR (Husked Ear Data Except When Stated Otherwise):

1 3

CM LENGTH

3 0

MM. MID-POINT
DIAMETER

5 8

GM. WEIGHT

Kernel Rows:

2

1 = INDISTINCT

2 = DISTINCT

2 0

NUMBER Varies

2

1 = STRAIGHT

2 = SLIGHTLY CURVED

3 = SPIRAL

Silk Color (Exposed at Silking Stage):

1

1 = GREEN

2 = PINK

3 = SALMON

4 = RED

Husk Color:

1

FRESH

1 = LIGHT GREEN

2 = DARK GREEN

3 = PINK

6

DRY

4 = RED

5 = PURPLE

6 = BUFF

Husk Extension: (Harvest Stage)

3

1 = SHORT (Ears Exposed) 2 = MEDIUM (Barely Covering Ear)

3 = LONG (8-10CM Beyond Ear Tip)

4 = VERY LONG (> 10 CM)

Husk Leaf:

1

1 = SHORT (< 8 CM)

2 = MEDIUM (8-15 CM)

3 = LONG (> 15 CM)

Shank:

0 5

CM LONG

3

NO. OF INTERNODES

3

1 = UPRIGHT

2 = HORIZONTAL

3 = PENDENT

Taper:

2-3

1 = SLIGHT

2 = AVERAGE

3 = EXTREME

Drying Time (Unhusked Ear):

1

1 = SLOW

2 = AVERAGE

3 = FAST

8. KERNEL (Dried):

Size (From Ear Mid-Point):

0 9

MM LONG

0 6

MM. WIDE

0 5

MM. THICK

Shape Grade (% Rounds)

1

1 = < 20

2 = 20-40

3 = 40-60

4 = 60-80

5 = > 80

8. KERNEL (Dried) :

☐ 1 Pericarp Color: 1 = COLORLESS 2 = RED-WHITE CROWN 3 = TAN 4 = BRONZE
 5 = BROWN 6 = LIGHT RED 7 = CHERRY RED
 8 = VARIEGATED (Describe) _____

☐ 1 Aleurone Color: 1 = HOMOZYGOUS 2 = SEGREGATING (Describe) _____

☐ 7 Very Dark 1 = WHITE 2 = PINK 3 = TAN 4 = BROWN 5 = BRONZE 6 = RED
 8 = PALE PURPLE 9 = VARIEGATED (Describe) _____

☐ 5 Endosperm Color: 1 = WHITE 2 = PALE YELLOW 3 = YELLOW 4 = PINK-ORANGE 5 = WHITE CAP.

Endosperm Type:

☐ 3 8 1 = SWEET (su1) 2 = EXTRA SWEET (sh2) 3 = NORMAL STARCH 4 = HIGH AMYLOSE STARCH
 5 = WAXY STARCH 6 = HIGH PROTEIN 7 = HIGH LYSINE 8 = OTHER (Specify)
☐ 0 7.26 9 = VARIEGATED (Describe) _____ *PADIFEROUS R/S*

GM. WEIGHT /100 SEEDS (Unsize Sample)

9. COB:

☐ 1 ☐ 4 MM. DIAMETER AT MID-POINT

Strength:

☐ 1 1 = WEAK 2 = STRONG

Color:

☐ 1 1 = WHITE 2 = PINK 3 = RED 4 = BROWN
 5 = VARIEGATED 6 OTHER (Specify) _____

10. DISEASE RESISTANCE (0 = Not Tested, 1 = Susceptible, 2 = Resistant):

<input type="checkbox"/> 0 STALK ROT (Diplodia)	<input type="checkbox"/> 0 STALK ROT (Fusarium)	<input type="checkbox"/> 0 STALK ROT (Gibberella)
<input type="checkbox"/> 0 NORTHERN LEAF BLIGHT	<input type="checkbox"/> 0 SOUTHERN LEAF BLIGHT	<input type="checkbox"/> 0 SMUT
<input type="checkbox"/> 0 SOUTHERN RUST	<input type="checkbox"/> 0 CORN SMUT	<input type="checkbox"/> 0 BACTERIAL WILT
<input type="checkbox"/> 0 BACTERIAL LEAF BLIGHT	<input type="checkbox"/> 0 MAIZE DWARF MOSAIC	<input type="checkbox"/> 0 STUNT
<input type="checkbox"/> 0 OTHER (Specify) _____		

11. INSECT RESISTANT (0 = Not Tested, 1 = Susceptible, 2 = Resistant):

<input type="checkbox"/> 0 CORNBORER	<input type="checkbox"/> 0 EARWORM	<input type="checkbox"/> 0 SAPBEETLE	<input type="checkbox"/> 0 APHID
<input type="checkbox"/> 0 ROOTWORM (Northern)	<input type="checkbox"/> 0 ROOTWORM (Western)		
<input type="checkbox"/> 0 ROOTWORM (Southern)	<input type="checkbox"/> 0 OTHER (Specify) _____		

12. VARIETIES MOST CLOSELY RESEMBLING THAT SUBMITTED FOR THE CHARACTERS GIVEN:

CHARACTER	VARIETY	CHARACTER	VARIETY
Maturity	None	Kernel Type	None
Plant Type	None	Quality (Edible)	None
Ear Type	None	Usage	None

REFERENCES:

- U.S. Department Agriculture. Yearbook 1937.
 Corn: Culture, Processing, Products. 1970 Avi Publishing Company, Westport, Connecticut. (Numerous Authors)
 Emerson, R.A., G.W. Beadle, and A.C. Fraser. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180. 1935.
 The Mutants of Maize. 1968. Crop Science Society of America, Madison, Wisconsin.
 Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S. Bul. 831. 1959.
 Butler, D.R. 1954 - A System for the Classification of Corn Inbred Lines - PhD. Thesis, Ohio State University.

COMMENTS: Additional Information could be gathered in 1984
 if helpful or needed.